

Application No. 09/598,210
Amendment dated May 5, 2004
Reply to Office Action dated February 5, 2004

Attorney Docket No. 040071-173
Page 8 of 11

Remarks

Claims 1-18 are pending, with claims 1, 4, 10, and 13 being in independent form. By the present amendment, claims 4 and 13 have been returned to their allowable form (as indicated in the Office action mailed October 8, 2003) and placed in independent form. The Examiners indication in this Action that these claims include patentable subject matter is also noted with appreciation. Accordingly, since these claims have already been indicated as allowable, the Amendments of claims 4 and 13 do not raise new issues. Thus, it is respectfully requested that this Amendment be entered.

In the Office Action, claims 1-18 stand rejected under 35 U.S.C. 101 and under 35 U.S.C. 112, first and second paragraphs, and applies the previously cited Abe Document, all in connection with "the manner in which the bit error rate is calculated when there is a bit error in the 1st received signal, and the manner in which such bit error rate is calculated when there is no previously received signal." Each of these rejections is respectfully traversed.

The Examiner contends that the bit error rate estimate is undefined when a bit error is present in the first block of the received signal at the start of data transfer because, at that moment, there is not a previously received signal. Accordingly, the Examiner concludes that no bit error rate estimate can be performed thereby resulting in a procedure having no useful tangible result, thus not satisfying 35 U.S.C. 101. Applicant disagrees.

MPEP 2107.01 states (MPEP 8th Ed., Rev. 1, Feb. 2003, p. 2100-33):

However, as the Federal Circuit has stated, "[t]o violate [35 U.S.C.] 101 the claimed device must be totally incapable of achieving a useful result." *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1571, 24 USPQ2d 1401, 1412 (Fed. Cir. 1992) (emphasis added). See also *E.I. du Pont De Nemours and Co. v. Berkley and Co.*, 620 F.2d 1247, 1260 n.17, 205 USPQ 1, 10 n.17 (8th Cir. 1980) ("A small degree of utility is sufficient . . . The claimed invention must only be capable of performing some beneficial function . . . An invention does not lack utility merely because the particular embodiment disclosed in the patent lacks perfection or performs crudely . . . A commercially successful product is not required . . . Nor is it essential that the invention accomplish all its intended functions . . . or operate under all conditions . . . partial success being sufficient to demonstrate

Application No. 09/598,210
Amendment dated May 5, 2004
Reply to Office Action dated February 5, 2004

Attorney Docket No. 040071-173
Page 9 of 11

patentable utility . . . In short, the definition of non-utility cannot be sustained without proof of total incapacity." If an invention is only partially successful in achieving a useful result, a rejection of the claimed invention as a whole based on a lack of utility is not appropriate. See *In re Brana*, 51 F.3d 1560, 34 USPQ2d 1436 (Fed. Cir. 1995); *In re Gardner*, 475 F.2d 1389, 177 USPQ 396 (CCPA), *reh'g denied*, 480 F.2d 879 (CCPA 1973); *In re Marzocchi*, 439 F.2d 220, 169 USPQ 367 (CCPA 1971).

One skilled in the art would appreciate that apparatus, and methods, according to the invention, or in general, operate in a number of modes. One such mode may be initialization. After initialization, other modes of operation are entered. The claims of the invention need not define methods and apparatus that operate in all possible modes. The Examiner incorrectly focuses on one possible scenario, which may occur during an initialization mode of the receiver. As stated in the MPEP, it is not essential that the invention operate under all conditions.

Moreover, the Examiner's broad assertion that if the first block of a data transfer includes a bit error, there is no previously received signal with which to calculate the bit error rate estimate is incorrect. One skilled in the art would appreciate that the previous received signal could have been received as part of an earlier data transfer. Therefore, the situation noted by the Examiner would only occur at initialization, e.g., when a mobile device is first activated and receives its very first signal. However, as one skilled in the art would readily appreciate, initialization occurs in a controlled environment and therefore would rarely result in a bit error in the first transmit block. For example, it is known by one skilled in this art that all receivers are tested as part of the manufacturing process, during which a "test signal" is applied to an apparatus upon initial factory startup of the receiver under very controlled conditions that would not produce bit errors in a properly functioning receiver. Therefore, the claimed invention is operational and useful. Accordingly, Applicant respectfully requests favorable reconsideration and withdrawal of the rejection of claims 1-18 under 35 U.S.C. §101.

Regarding the rejections under 35 U.S.C. §112, first paragraph, as discussed above, in the rare instance that the first received signal at the start of data transfer includes a bit error, the bit error estimate may be estimated using a signal received during a previous data transfer. Furthermore, one skilled in the art would appreciate

Application No. 09/598,210
Amendment dated May 5, 2004
Reply to Office Action dated February 5, 2004

Attorney Docket No. 040071-173
Page 10 of 11

that logic/algorithms configured to carry out the claimed invention should be initialized prior to their initial activation. Finally, MPEP 2164.08, states:

The presence of inoperative embodiments within the scope of a claim does not necessarily render a claim nonenabled. The standard is whether a skilled person could determine which embodiments that were conceived, but not yet made, would be inoperative or operative with expenditure of no more effort than is normally required in the art. *Atlas Powder Co. v. E.I.*

For example, a disclosure of an electrical device that does not describe how to power the device on prior to operation does not render the claims nonenabled. As a further example, a claim to a method of cutting an object with a knife is enabled by a disclosure that fails to describe how the knife would be first sharpened. Similarly, one of ordinary skill in this art would appreciate that the apparatus and methods of the claims are and can be initialized without undue experimentation. Accordingly, the specification enables one skilled in the art to implement the claimed invention, and the rejections under 35 U.S.C. §112, first paragraph, should be withdrawn.

Regarding the rejections under 35 U.S.C. §112, second paragraph, once again as discussed above, one skilled in the art would appreciate that the previously received signal could have been received in connection with a previous data transfer. Furthermore, one skilled in the art would appreciate in view of the disclosure that the variables employed in the method should be initialized.

Moreover, according to Section 2173.02 of the MPEP, "Definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." It is submitted that the claims meet the requirements of the MPEP, for at least the same reasons stated above.

The Examiner agrees with Applicant in the Action (p. 1), that the previously calculated bit error rate being calculated using a previously received signal is not disclosed in the prior art of record. Accordingly, the pending claims are believed to be patentably distinct over the prior art.

Application No. 09/598,210
Amendment dated May 5, 2004
Reply to Office Action dated February 5, 2004

Attorney Docket No. 040071-173
Page 11 of 11

For the foregoing reasons, Applicant believes the application is in condition for allowance and requests Notice to this effect be provided. If any questions remain, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: 

Theodoros Thomas
Registration No. 45,159

P.O. Box 1404
Alexandria, Virginia 22313-1404
(919) 941-9240

Date: May 5, 2004

I hereby certify that this correspondence is being sent by facsimile transmission to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 to the following facsimile number:

Facsimile Number: 703 872 9306

Date of Transmission: May 5, 2004


Jennie Snead